

OSCILLATION APPARATUS AND COMMUNICATION  
APPARATUS USING THE SAME

ABSTRACT OF THE DISCLOSURE

An oscillation apparatus has a multi-mode dielectric resonant element; a plurality of oscillation circuits, each including a line coupled to the dielectric resonant element and active devices connected to ends of the line; and a substrate having the lines and the active devices provided thereon. The dielectric resonant element is placed on the substrate. The magnetic fields, occurring in the dielectric resonant element, in a plurality of resonant modes having different resonant frequencies are coupled to the corresponding lines in the plurality of oscillation circuits.